Summary of and Excerpts from the Draft Report Entitled

The Rainy Creek Site (24LN1045) Data and Significant Information Recovery Report as Part of the Screening Plant Removal Action, Libby, Montana, Asbestos Emergency Response Project – U.S. Environmental Protection Agency Region 8

Edited by Stephen A. Aaberg, April 2002

Prepared by: CDM Federal Programs Corporation

December 10, 2002

Page i ACKNOWLEDGEMENTS

Spelling: Borowiec, Hobza

Pages ii-iv ABSTRACT

No comments.

TABLE OF CONTENTS

General comment: Synchronize page numbers in the Table of Contents with actual page numbers in the text.

Pages 1-8 INTRODUCTION

Page 1, third paragraph, third sentence: ...Approximately 18" of soil was removed from the Screening Plant site south of Rainy Creek. Approximately 4' of soil was removed from the Screening Plant site north of Rainy Creek.

Pages 8-16 24LN1045 REVIEW

No comments.

Pages 17-42 LEGAL CONSIDERATIONS AND PROCESSES

This section describes legislation enacted to regulate activities on sites having archaeological significance to Native Americans. The National Historic Preservation Act (NHPA) was enacted in 1966. Subsequently, a system of State Historic Preservation Offices (SHPOs) were established to aid in administration of the NHPA on a State level. Since EPA Region 8 is directing and coordinating the Libby Asbestos Project, federal laws, primarily NHPA apply. Compliance with Federal cultural resource laws has become known as the "Section 106 Process."

EPA, through Volpe and CDM, began the Section 106 process by contacting the Montana SHPO in Spring 2000. Due to the emergency nature of the Libby Asbestos Project, EPA requested the Montana SHPO to expedite the Section 106 Process. Following an August 3, 2000 meeting at the Montana SHPO office, CDM's archaeological subcontractor, Aaberg Cultural Resources Consulting Services (ACRCS), drafted letters regarding the Section 106 Process and plan for recovery of significant information at 24LN1045 for EPA to sign and send to the Advisory Council on Historic Preservation (Advisory Council) and Salish-Kootenai Tribal Historic Preservation Office (THPO). Comments on the data recovery plan were received from the Montana SHPO on behalf of the Advisory Council, but not from the THPO. On August 18, 2000, Mr. Aaberg sent EPA copies of a Memorandum of Agreement (MOA) for review and signature by EPA, the Montana SHPO, and Salish-Kootenai THPO. In accordance with direction from EPA, Volpe and CDM contacted Mr. Aaberg and asked that archaeological investigations begin on August 26, 2000, anticipating that comments on the data recovery plan and the signed MOA would be received imminently.

During a September 2000 conference call, representatives of the Salish-Kootenai THPO acknowledged receipt of the data recovery plan and EPA agreed to continue informal consultation in the absence of a signed MOA. An MOA was not signed and comments were not received from the THPO. The archaeological investigation recovered cultural deposits from property owned by Mel and Lerah Parker and property owned jointly by W.R. Grace and the Kootenai Development Corporation (KDC).

This section includes a chronology of events that occurred prior to and during archaeological investigations at the Screening Plant site. It should be read to reiterate those archaeological activities between parties having an interest in the Section 106 Process specific to the Screening Plant site.

Page 32 Last Paragraph, Second Sentence

Change 2002 to 2000.

Pages 42-50 PLAN FOR RECOVERY OF SIGNIFICANT INFORMATION FROM 24LN1045

This section addresses the area of 24LN1045 north and south of Rainy Creek. This section describes previous archaeological investigations at the site and in the area. In this section, Mr. Aaberg acknowledges that essentially all of the site has been contaminated by vermiculite, will be partially or totally destroyed or disturbed by removal of the contaminated soil, archaeologists will need to be 40 Hour OSHA trained and certified, and given the obvious threat to public health and safety, asbestos remediation in the locality is considered an emergency.

This section also states that since 24LN1045 is on private land, any artifacts recovered from the site during data recovery belong to the landowners. Mr. Aaberg states the objectives of the archaeological investigations and subsequent analyses, time dating to determine site use, and analysis of faunal remains to determine seasonality of occupations. With EPA authorization, archaeological excavations are also made on the KDC Flyway Property. Bone fragments were cataloged and shipped to a faunal specialist at the Mid West Archaeological Center in Lincoln, Nebraska for analysis.

General comment: This section should be edited to past tense since the excavations were completed in 2000, not planned for some future time.

Pages 51-96 ENVIRONMENTAL SETTING AND NATURAL HISTORY

This section describes the geology, soil stratigraphy, landforms, vegetation, fauna, fish, waters and climate in the general area. The known land use history of the specific properties is described. Test trench findings on the Screening Plant and KDC Flyway properties, i.e. soil strata, bone fragment locations, fire pit and fire-cracked rock locations, etc. are graphically and pictorially displayed in this section.

General comment: It would be beneficial to include a site plan to orient the reader to the locations of the test trenches in beginning of this section.

General comment: The pagination in the Table of Contents does not match the actual page numbers in the section. Edit the Table of Contents.

Pages 96-109 CULTURE HISTORY

This section indicates that there is limited information available to describe the cultural traits of past human groups by analyzing recovered material objects or artifacts, in this case, projectile points. Projectile point analyses were performed in conjunction with the construction of the Libby Dam and creation of Lake Koocanusa upstream of 24LN1045.

What is known of seasonal and historic tribal movements east and west of the Rocky Mountains prior to the early 1800s has largely been obtained by oral recollections. In the early 1800s, the Hudsons Bay Fur Company and rival the Northwest Company established forts, fur posts and trading posts in the area from Bonners Ferry, Idaho to Kalispell, Montana and north into British Columbia. Artifacts associated with the fur trade era (early 1800s to the late 1860s) were not found in the archaeological excavations made in 2000. The fur trade gave way to gold mining. Railroads were extended into northwest Montana in the early 1890s, homesteading and the first sawmills began in the Libby area around 1890, and the first post office was established in Libby in 1891. In the early 1900s, mining of lead, silver and copper increased in the area. The vermiculite mine began operating during World War I and continued operations to 1991 when it shut down.

Page 107 Fourth Paragraph, First Sentence

Change "oar" to "ore."

Pages 109-112 PREVIOUS ARCHAEOLOGY

During planning for the Libby Dam in the 1950s, several archaeological sites were identified on both sides of the Canadian border and one was tested. In 1965, plans for the dam were complete and the National Park Service contracted with the University of Montana for a two-year test of 12 sites. In 1976, after completion of the Libby Dam, the U.S. Army Corps of Engineers conducted archaeological surveys below the dam. In the late 1970s, Montana State University and the University of Idaho conducted archaeological surveys of the shores of Lake Koocanusa and the area below the dam respectively. Test excavations were made in conjunction with the reconstruction of Highway 37 at the same time. Additional archaeological surveys were made in the area during the 1980s when the Bonneville Power Administration developed plans for an electrical transmission line from the dam to Idaho.

Pages 112-116 FIELD METHODOLOGY

Due to potential exposure to tremolite asbestos fibers during archaeological excavations, EPA required Hazardous Waste Operations Emergency Response (HAZWOPER) training be provided to all archaeologists scheduled to work onsite 24LN1045. A six-person crew from ACRCS spent 21 days onsite recovering archaeological data. The modifications to typical archaeological excavation activities necessitated by the potential exposure to the tremolite asbestos fibers is described in this section along with photographs. Seven excavation units and nine test trenches were completed by ACRCS in September and October 2000.

Pages 116-129 STRATIGRAPHY AND CHRONOLOGY

This section discusses the sediment deposition over the last 3,000 to 5,000 years and intense occupations of the site beginning about 2,000 years ago. The 20 projectile points and projectile point fragments appear to associate with occupations during the Late Prehistoric Period, generally within the last 1,500 years. Figures 40 and 41 provide photographs of the projectile points and projectile point fragments and the depths below ground surface where they were found.

Page 117 First Paragraph, Third Sentence

Is difficult to understand. Lithic detritus (less dense) what?

Page 128

Change "striped" surface to "stripped" surface.

Pages 129-174 MATERIAL CULTURE CONTENT AND TECHNICAL ANALYSES

This section provides lithologic assessment of the site. It includes photographs of chipped stone artifacts, ground stone artifacts, a bone artifact, butchered animal bone, heat-altered rock, historical artifacts and analyses of their uses. This section also includes a description of the tool making process using various types of stone (cherts, argillites, quartzite, basalt, rhyodacite, magnetite and obsidian) and shaping techniques. Projectile points, rudimentary stone, and bone hand tools and fragments thereof along with discussions of where they were found on the site and at what depth, their estimated age and uses for cutting, scraping, grinding, net weights, etc. X-ray fluorescent analysis of obsidian, a black translucent volcanic glass, found at the site determine its origins from the Obsidian Cliff in Yellowstone National Park, Wyoming and Malad, in southeastern Idaho, near the Utah border.

The bone artifact is described as coming from a medium sized deer, being pointed and polished, and used for perforating hides.

The heat-altered rock and bone fragments were the most abundant cultural material recovered during the 2000 excavations. Two thousand seven hundred twenty two pieces of heat-altered rock were noted in the excavation units. The heat-altered rock and all cultural materials decreased with depth in the one meter of sediment excavated in all units. Interpretation of the heat-altered rock and bone fragments found at the site indicate bone grease production through boiling and stone boiling, roasting, or baking that occurred at the Rainy Creek Site.

Page 136 First Paragraph, Third Sentence

Spelling - metmorphic

Pages 165-167 Faunal Assemblage

This subsection reiterates that in February 2001 all bone material recovered during the 2000 excavations at 24LN1045 were shipped to a faunal specialist in Lincoln, Nebraska. The faunal specialist told CDM's archaeologist on November 26, 2002 that the analyses had not been performed and the bone material will be returned to him promptly. Basic observations by the Aaberg archaeological team have tentatively identified the majority of bone fragments as being from ungulate (hoofed animals). Skull fragments with antler buttons suggest whitetail deer. The bone fragments were typically found in locations where heat altered rock was also found, primarily closer to ground surface.

Other artifacts recovered from the site included one blue glass trade bead, a wire nail, a four-hole bone button, a few bottle fragments and a milk glass jar. Immunological analysis of floral and faunal residue on recovered artifacts identified deer, rabbit, and bovine (bison or cow). Residues from the caper plant, bee plant and chenopodium (goose foot) were found on tools recovered from the site. Finding fragments of obsidian (black volcanic glass) suggests interaction among the peoples of northwest Montana since the obsidian sources are 300 to 500 miles from 24LN1045.

Pages 174-188 MIDDLE KOOTENAI RIVER SUBSISTENCE MODELING

Previous studies suggest occupants' diets consisted of a mix of plant and animal resources during warmer months and deer during the colder months. Climatic modeling has estimated historical trends in mean annual temperature, precipitation, snowfall, soil moisture, and snowpack and snowfall duration models have been used to estimate deer winter range. The modeling supports the theory that the Kootenai River valley bottom settings provided optimum habitat for deer populations and occupation of the Rainy Creek area was intense and repetitive from at least 2000 years ago.

Pages 188-196 INTERPRETIVE AND ANALYTICAL SUMMARY

The significance of data recovered during the few excavations at 24LN1045 in 2000 is best realized when viewed in a regional perspective. Excavations to a meter in depth generally yielded culturally significant archaeological resources dating back 2000 years. Deeper excavations, which may yield archaeological resources dating back to nearly 4000 years ago, were not part of the 2000 investigations.

The variety of materials and shapes of projectile points found in the 2000 Rainy Creek excavations suggests some sort of contact between the peoples of northwestern Montana and the Plateau region. The glass trading bead indicates trade occurred between the Kutenai and tribes to the north and west. Combining the findings from other archaeological investigations with cultural resources recovered in 2000 suggest the Kutenai seasonal occupations and migrations ranged from Jennings in winter to Libby in summer. No evidence of fur trading posts were found during the 2000 archaeological excavations.

Although detailed faunal analysis of recovered bone fragments was not completed, observations made by the Aaberg archaeological team suggest the occupants' diet focused on procuring and processing deer rather than on fish. Seeds and plants made up a small portion of the occupants' diet. The high frequencies of butchered bone and heat altered rock, along with roasting platforms and tools, suggest meat was deboned, cut and roasted, the bone and marrow ground up and boiled to produce bone grease. The bone tool and scraping tools indicate that hides were worked and there was virtually no waste to a deer kill. The Rainy Creek site provided access to a variety of animal, plant, and aquatic resources making it ideally suited for relatively extended stays as winter residential base camps for groups of people for centuries, as far back as 3,700 years ago.

Page 192 First Paragraph, Sixth Sentence

Spelling - littlie

Pages 196-197 MANAGEMENT SUMMARY AND FUTURE RESEARCH

The first three paragraphs summarize the excavations made at 24LN1045 in 2000 and the cultural resources recovered. This information supports other archaeological research conducted in the area that documents occupation of the site by K'tunaxa/Kutenai Indians.

General comments: This section should be read in its entirety. CDM suggests that the fourth paragraph be rewritten. Perceptions of EPA staffing levels with respect to cultural resource specialists and knowledge of the Section 106 process are not necessary. The health risks associated with inhalation of asbestos fibers by humans is well known. This section should reflect the need to fast-track emergency response projects when adverse effects on human health are confirmed to exist.

Major construction projects undertaken by the U.S. Army Corps of Engineers, National Forest Service, Bureau of Land Management, State Highway and Transportation Departments, etc. typically have substantial planning and design phases before construction actually begins. The schedules of such projects provide the time required to undertake archaeological investigations as required by the Section 106 process. An emergency response project, on the other hand, essentially involves removing the threat to public health as quickly as possible, leaving little lead time before removals actually begin.

In this section, EPA should be acknowledged for having provided the archaeological team with OSHA 40-hour Hazwoper training, personal protective equipment, personnel and equipment decontamination facilities, and directing Government removal contractors to assist the archaeological team with trench excavations.

Future research at 24LN1045 would need to be performed with appropriate personnel protective equipment as deeper excavations would likely be in soils containing vermiculite and tremolite asbestos fibers.